Determination of Public Land (Rangeland) Health for 64053 DUNNAHOO HILLS

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these Standards.

Field assessment worksheets and other available data which evaluate the local indicators, were completed for this allotment. Based on the assessments, it is my determination that the Public Lands within the Dunnahoo Hills Allotment #64053 meet the Upland Sites Standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species Standard. There are no Public Land riparian areas on this allotment, therefore this Standard will not be addressed.

/s/ Jerry Dutchover .	08/02/2012
Assistant Field Manager	Date

Standards of Public Land Health
Evaluation of 64053 DUNNAHOO HILLS Allotment
[03/01/2012]

The Roswell Field Office conducted rangeland health assessments at three study sites within the JAMES CLIETT Allotment #64053. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64053-BIG-E100	X			X			N/A		
64053-NORTH-E099	X			X			N/A		
64053-RIVER-E098	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on Dunnahoo Hills, allotment #64053. Ten of these assessed soil site stability, 11 hydrologic functions and 13 for biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on 3 trend plot locations within this allotment were utilized to make rangeland health determinations. Quantitative evaluations are performed by the Roswell Field Office, which include some or all of the following: ground and vegetative cover and composition, production, frequency and ecological condition. These collections were initiated in the late 1970's/early 1980's, are scheduled and conducted approximately every 5 to 10 years.

This allotment contains 4,745 acres of public land. The studies are located on a Loamy SD-3 ecological site, a Salt Flats SD-3 site and a Gyp-Upland CP-2 ecological site. At each of the study locations all of the 22 indicators were rated as either 'None to Slight' or 'Slight to Moderate' degree of departure from the Ecological Site description and/or Ecological Reference Area.

Recommendations: As the majority of the indicators fall in the 'None to Slight' or 'Slight to Moderate' category, this allotment is rated as "Meeting" the standard for Rangeland Health. Continue the rangeland monitoring studies to insure proper stocking rates are maintained and that the perennial grasscover and good plant composition remains.

It is the professional opinion of the Assessment Team that the public land within this allotment meets the Upland and Biotic standards.

Recommendations: Monitoring should continue on this allotment and up to date datum is necessary. The allottee deploys a grazing rotation which is advantageous to the health of the range, both public as well as private land.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64053-BIG-E100			
Legal Land Desc	SENE 24 0090S 0240E Meridian 23	Acreage	3933
Ecosite	042CY036NM SALT FLATS SD-3	Photo Taken	Y
Watershed	13060007010 GOPHER		
Observers	ARNOLD & PETERSON	Observation Date	03/01/2012
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	HhA	Soil Taxon Name	HOLLOMEX
Texture Class	NM644 L	Soil Phase	HOLLOMEX
Texture Modifier	NM644 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	1.6	NOAA Growing Season Precipitation	0.84
NOAA Avg Annual Precipitation	4.93	NOAA Avg Growing Season Precipitation	3.81
Disturbances and Animal Use:	No livestock are noted on the allotment at this time.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:	Drought effects					
S H	Pedestals and/or Terracettes				X	
Comments:	Very dry conditions have left the vegetation somewhat subject to possible wind and water erosion.					
S H	Bare Ground				X	

Comments:						
S H	Gullies				X	
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas				X	
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer				X	
Comments:	No livestock trails seen.					
B	Functional/Structural Groups				X	
Comments:						
B	Plant Mortality/Decadence				X	
Comments:	20-30% mortality.					
H B	Litter Amount				X	
Comments:						
B	Annual Production				X	
Comments:	There is about 250-300 lbs/ac at the present time.					
B	Invasive Plants				X	
Comments:	Prickly pear (Opuntia spp.) is noted here scattered throughout.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:						
B	Wildlife Habitat				X	

Comments:						
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	9	1
H	Hydrologic	0	0	0	10	1
B	Biotic	0	0	0	11	2

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	0	13

Site Notes: No livestock on the allotment at this time.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64053-NORTH-E099			
Legal Land Desc	NWNE 1 0090S 0240E Meridian 23	Acreage	613
Ecosite	070BY066NM GYP UPLAND CP-2	Photo Taken	Y
Watershed	13060005070 SALT		
Observers	ARNOLD & PETERSON	Observation Date	03/01/2012
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	HMA	Soil Taxon Name	HOLLOMEX
Texture Class	NM644 L	Soil Phase	HOLLOMEX-REEVES-MILNER
Texture Modifier	NM644 LOAM,DRY		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	1.6	NOAA Growing Season Precipitation	0.84
NOAA Avg Annual Precipitation	4.93	NOAA Avg Growing Season Precipitation	3.81
Disturbances and Animal Use:	There is some oil and gas activity in the vicinity, with roads and pipelines. No animal disturbances can be seen at the present time.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:	Slope dependent					
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	

Comments:						
S H	Gullies				X	
Comments:	Slope dependent; some channelization expected.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer				X	
Comments:						
B	Functional/Structural Groups				X	
Comments:						
B	Plant Mortality/Decadence				X	
Comments:						
H B	Litter Amount				X	
Comments:						
B	Annual Production				X	
Comments:						
B	Invasive Plants				X	
Comments:	Mesquite (Prosopis glandulosa) scattered.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusts seen.					
B	Wildlife Habitat				X	

Comments:						
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	8	2
H	Hydrologic	0	0	0	10	1
B	Biotic	0	0	0	11	2

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	0	13

Site Notes:

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64053-RIVER-E098			
Legal Land Desc	SWNE 4 0090S 0250E Meridian 23	Acreage	199
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060005080 MACHO		
Observers	ARNOLD & PETERSON	Observation Date	03/01/2012
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	APA	Soil Taxon Name	ALAMA
Texture Class	NM644 FSL	Soil Phase	ALAMA-POQUITA
Texture Modifier	NM644 DRY		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	1.6	NOAA Growing Season Precipitation	0.84
NOAA Avg Annual Precipitation	4.93	NOAA Avg Growing Season Precipitation	3.81
Disturbances and Animal Use:	No livestock on this allotment at this time.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	

Comments:						
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer				X	
Comments:						
B	Functional/Structural Groups				X	
Comments:						
B	Plant Mortality/Decadence				X	
Comments:						
H B	Litter Amount				X	
Comments:						
B	Annual Production				X	
Comments:						
B	Invasive Plants				X	
Comments:	Cholla and creosote scattered throughout.					
B	Reproductive Capability of Perennial Plants				X	
Comments:	All plants have vigorous growth and vitality. All grasses, including forbs have good reproductive potential.					
S	Physical/Chemical/Biological Crusts				X	
Comments:						
B	Wildlife Habitat				X	

Comments:						
B	Wildlife Populations				X	
Comments:	Mule deer noted here.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	7	3
H	Hydrologic	0	0	0	9	2
B	Biotic	0	0	0	11	2

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	0	13

Site Notes: